Additional Points Relating to the
IPA Court of Appeals Challenge to
FAA Final Flight and Duty Time Rule

- IPA today filed a Petition for Review in the U.S. Court of Appeals for the D.C. Circuit in order to challenge FAA's exclusion of cargo operations from the final flight and duty time rule issued yesterday. (Rule p. 5-6, 15, 259)

- IPA seeks to have cargo operations included in the scope of the rule because of the important safety benefits provided by the rule. IPA does not seek to delay implementation of these important safety benefits to passenger operations.

- As set forth in more detail, below, FAA generally acknowledges that "factors that lead to fatigue are universal" (Rule p. 259) and that *night-time operations* (during pilots' circadian lows) and *operations that cross multiple time zones* warrant *stricter* measures to guard against fatigue. Rule p. 5.

    - Cargo operations such as those conducted by UPS, involve these two fatigue-exacerbating factors to a greater extent than passenger operations, *yet cargo operations will remain subject to the* ***current rules that FAA says are inadequate to guard against pilot fatigue***.

        - "The FAA believes that its current regulations do not adequately address the risk of fatigue." Rule p. 19.

        - "As the NPRM stated, the FAA has considered the alternative of maintaining the status quo, but rejected that alternative because the status quo subjects society to an 'unacceptably high aviation accident risk.' 75 Fed. Reg. at 55882." Rule p. 259.

        - "For example, as discussed in the Applicability section of this preamble, some of the [Flight Duty Periods] FDPs permitted by the existing regulations *can result in a five-fold increase to accident risk*." Rule 259

        - "As the National Transportation Safety Board repeatedly notes, the FAA's [current] regulations do not account for the impact of circadian rhythms on alertness." Rule p. 19.

    - "The final rule recognizes the natural circadian rhythms experienced by most people that causes them to be naturally more tired at night than during the day. Under the final rule, flightcrew members will be able to work longer hours during the day than during the night. Significant changes in time zones, a situation unique to aviation, are accounted for to reduce the risk to the flying public posed by 'jetlag'." Rule p. 5

- The primary time-of-day safety concern . . . is that flightcrew members who fly during the WOCL suffer a severe degradation of performance." Rule p. 122.

- "[F]lightcrew members' circadian rhythms needed to be addressed because studies have shown that *flightcrew members who fly during their window of circadian low experience severe performance degradation*." Rule p. 110 (emphasis added.) See also Rule p. 7.

    - Yet that segment of the industry – air cargo – that has the greatest proportion of night flying, is exempted from these important safety provisions.

    - FAA acknowledges that this performance degradation greatly increases the risk of an accident, but does not deem the costs of such an accident involving cargo planes to be sufficiently high to justify reducing the risk. Thus, the risk of such a cargo plane accident is not reduced by the new rule

    - "In formulating this rule, the FAA was particularly concerned about cumulative fatigue caused by repeatedly flying at night. Modeling shows substantially deteriorating performance after the third consecutive nighttime FDP for flightcrew members who worked nightshifts during their [window of circadian low] WOCL and obtained sleep during the day." Rule p. 10.

        - Exempting cargo operations that involving repeated night flying does nothing to relieve cumulative fatigue for cargo pilots.

- FAA cites, as one of the reasons for the rule, NTSB's recommendations, spawned by fatigue-related accidents, that FAA tighten the limits for flight and duty time to prevent pilot fatigue. (Rule p. 19-22).

    - Yet the NTSB Chair stated that "we are extremely disappointed that the new rule is limited to Part 121 carriers. A tired pilot is a tired pilot, . . . whether the payload is passengers or pallets. As the FAA said in its draft, 'Fatigue threatens aviation safety because it increases the risk of pilot error that could lead to an accident.' This is particularly a concern for crews that fly 'on the back side of the clock.'" NTSB Press release 12-21-11.

        - FAA acknowledges the general concept that pilots working under the same conditions will feel the same level of fatigue *regardless of the type of operation that he or she is participating in*." (e.g., Rule p. 259 (emphasis added)), but, incredibly excludes a whole category of operations – air cargo -- from the scope of the rule.

        - The pilot fatigue that was a factor in one of the air crashes cited by NTSB and FAA as spurring the need for the new rule was brought about by "a demanding round trip flight to Europe that crossed multiple time zones . . . [and] involved multiple legs flown a night following daytime rest periods that

caused the flightcrew to experience circadian rhythm disruption" (Rule at p. 21). In fact, this was "a regular *cargo* flight from Germany." NTSB Aircraft Accident Report PB95-910406 p. 2 (emphasis added).

- In their successful attempt to evade being covered by the new rule, Cargo carriers state that they "regularly operate long-haul flights and point-to-point operations outside the United States, traveling across multiple time zones and at all hours of the day and night . . . According to the industry commenters, these types of nighttime and around-the-world operations are the norm for all-cargo carriers.." Rule p. 27-28.

    - But FAA states that, based on scientific research, these types of operations (crossing multiple time zones and flying at night, during the circadian low) should be subject to **more stringent** not less stringent safeguards.

        - "The FAA also agrees with NIOSH that long duty periods that take place during the [Window of Circadian Low] WOCL substantially increase the risk of an accident. Rule p. 118-19

        - "As discussed above, studies have found that human beings who work during the WOCL experience substantial degradation in their ability to safely perform their assigned duties. Studies have also found that each additional hour worked after approximately 8 or 9 hours exponentially increases the risk of an accident." Rule p. 118-19**.**

        - "Nighttime operations are particularly fatiguing because flightcrew members who work during these operations do so during the WOCL after obtaining less-restful daytime sleep. Studies have shown that this type of work not only leads to transient fatigue, but also leads to cumulative fatigue if repeated over a series of consecutive nights." Rule p. 192.

        - "In addition, the FAA has determined that there is little evidence that a flightcrew member who repeatedly works on nightshifts will experience substantial safety-relevant changes to his or her circadian rhythm through acclimation. . . . While people who continuously work at night may experience some acclimation, that acclimation is neither complete nor long-lasting. The nightshift acclimation also generally disappears after only a few days off." Rule at p. 119

- The FAA stated that "the major provisions of this rule are based on uncontroversial scientific findings that apply to all human beings. As the NPRM pointed out, sleep science, while still evolving, is clear in several important respects:

    most people need eight hours of sleep to function effectively, most people find it more difficult to sleep during the day than during the night, resulting in greater fatigue if working at night; the longer one has been awake and the longer one spends on task, the greater the likelihood of

fatigue; and fatigue leads to an increased risk of making a mistake. 75 Fed. Reg. at 55857." Rule at p. 254.

- There are no exceptions to these fundamental principles. FAA further asserted that "These uncontroversial scientific findings form the basis for almost all of the major provisions in this rule." Rule at p. 254.

    - The one major provision not based on these uncontroversial scientific findings is the exclusion of cargo operations from the scope of the rule; FAA has cited no basis for assuming that pilots engaged in cargo flights are immune from these universal factors.

        - In fact, the NPRM indicated that cargo pilots were subjected to these universal factors, and the Final Rule contains no discussion to indicate that they are not.

            - FAA specifically noted that, "[i]n light of its determination concerning the universal applicability of factors underlying fatigue, the FAA proposed a single set of flight, duty, and rest regulations that would regulate these factors. The proposed regulations would have been applicable to all part 121 domestic, flag, and supplemental operations." Rule p. 25.

    - If there were any scientific or principled basis for excluding cargo operations from the important safety benefits provided by the rule, it was incumbent upon FAA to discuss this in making such a radical change in scope of the Final rule, but the agency did not do so.

FAA makes clear that cost is the **only** basis for the cargo carve out:

- "The FAA also has removed all-cargo operations from the applicability section of the new part 117 because their compliance costs significantly exceed the quantified societal benefits." Rule p. 13.

- "Turning to concerns expressed by air carriers conducting all-cargo operations, as discussed in the regulatory evaluation, the FAA has determined that this rule would create far smaller benefits for all-cargo operations than it does for passenger operations. Consequently, the FAA is unable to justify imposing the cost of this rule on all-cargo operations." Rule p. 30-31.

- In contrast with every other issue, FAA does not offer a reasoned explanation for its decision on excluding cargo operations from the scope of the rule. It simply says it costs too much, and includes a cursory statement of the supposed costs and benefits, with no explanation of how either the costs or benefits are derived:

    - "The projected cost for all-cargo operations is $306 million ($214 million present value at 7% and $252 million at 3%). The projected benefit of avoiding one fatal

all-cargo accident ranges between $20.35 million and $32.55 million, depending on the number of crewmembers on board the aircraft." Rule p. 13, n. 1.

- The public was entitled to see review and analyze the basis for this cost/benefit analysis. If these figures were supplied by the air cargo industry, they should have been made available to the public for analysis or challenge by other interested parties, such as IPA.

- FAA changed its proposed rule (to provide a carve-out for cargo carriers) based on input from one segment of the industry, with a vested interest in the change, without allowing an opportunity for others to comment on the basis for that change. The assumptions involved in the costs and benefits warrant scrutiny, as well as the process used to make the calculations.

- The FAA says that it "decided not to issue a supplemental NPRM as part of this rulemaking . . . . We have made no changes that were not either originally contemplated in the NPRM or a logical outgrowth of that document." Rule p. 252-53

  - But it is not a logical outgrowth of the NPRM -- which, like the Final Rule, highlighted the particular dangers of night flying and crossing multiple time zones – to exclude from the new rules designed to help combat pilot fatigue in such circumstances, the air cargo industry that, by its own admission, *involves a greater percentage of such operations than the air passenger industry that is covered by the new rules*.

  - "As the NPRM stated, the FAA has considered the alternative of maintaining the status quo, but rejected that alternative because the status quo subjects society to an 'unacceptably high aviation accident risk.' 75 Fed. Reg. at 55882." Rule p. 259.

    - Yet FAA allowed the high accident risk to remain for cargo operations, without serious explanation.

    - FAA acknowledges that the old rules "can result in a five-fold increase to accident risk." Rule 259

  - FAA states that "existing regulations allow flightcrew members in passenger operations to accumulate unsafe amounts of fatigue." (Rule p. 263).

  - There is no basis for implying that the existing rules do not also allow flightcrew members in cargo operations to accumulate unsafe amounts of fatigue. But FAA has inserted "passenger" so as not to call attention to the fact that its decision to exempt cargo operations will continue to allow cargo flightcrews to accumulate unsafe amounts of fatigue.

- It is as if FAA had recognized that cargo operations were just as susceptible to pilot fatigue as passenger operations (if not moreso, due to excessive back of the clock and multiple time zone flying), and then was told by OMB that cargo operations would be exempt, and so the FAA had to quickly insert “passenger” in contradiction of the fundamental principles it has heretofore consistently espoused. [There are other examples we can add.]